PERSONALIZED USER INTERFACE BASED ON IN-APPLICATION BEHAVIOR

CLAIM OF PRIORITY

The present application claims priority to and benefit of the commonly owned provisional patent application No. 62/480,258 filed on Mar. 31, 2017, and entitled "Personalized User Interface based on In-Application Behavior," which is incorporated herein by reference in its entirety.

BACKGROUND

Field

The present disclosure relates to systems and methods for providing games for user interaction, and more specifically to providing a user interface with options to view details of game play. In some examples, user game play interactions are collected and analyzed in order to generate a personalized user interface (UI) and/or user experience design (UX). Examples are described regarding ways to change a main UI/UX interface after a user leaves an application to best assist the user in getting back into the application (e.g., action of the game). In some examples, specific user interaction data is captured during game play/use of the application, which is then analyzed to identify hints and/or assistance to the user's subsequent game play or use of the application.

Description of the Related Art

One of the rapidly growing technologies is in the field of cloud gaming where users are able to access a number of games available on a cloud gaming site over a network, such as the Internet, and begin playing the game. A user accesses his/her account on the cloud gaming site and selects a game from a list of games that are available for the user account, for game play. When the user selects a game for game play from the cloud gaming site, using a client device, a server in the cloud gaming site starts a session of game play and begins streaming the video frames of the game to the client device from which the user accessed the cloud gaming site. When the user exits the game play session before completing the game, the game play is paused and the game data is stored as metadata to enable re-starting of the game from where the user left off. The game data that is captured includes actions taken, results obtained, points scored, hurdles crossed, enemies captured or overcome, game tools captured, spent or awarded, communications with friends, game clips shared, mini-games generated, etc. However, when the user re-starts the game, the game logic merely loads the game for game play. There is no easy way to reconstruct all the details of the game play (in-game messages between friends/buddies/play partners, details of chats, game statistics, etc.), provided in the metadata and render it to the user, when the user re-starts the game.

Further, the user interface provided by the game logic is same for every user. The user interface is not customized for each user and there is no easy way to obtain all the details of game play for a user. Still further, the user interface does not show any extra gameplay metadata about the in-game communications and other social interactions conducted during game play or any other details of the game session. When a new user begins playing the game, the user may not be well versed with all the actions that need to be taken to overcome challenges or hurdles in the game. This causes a lot of frustration to a user as the user is not able to accomplish what he wants in the game, causing him to leave the game without having a satisfactory user experience.

It would be advantageous if the user can be provided with options to view specific ones of the behavior metrics for the user before or during game play and to allow the user to view game state of a prior game play of the game played by the user without having to navigate through multiple menus. It would also be advantageous if the user is allowed to view game play of other users to allow the user to improve his/her game playing skills.

It is within this context that embodiments of the invention arise.

SUMMARY OF THE INVENTION

Embodiments of the present invention disclose methods, systems and computer readable media for updating a user interface with options to enable a user of a game to view details of prior game play of the user or of other users. The user interface provides access to a plurality of games that are available on a cloud game server, for a user account. Although discussion is provided herein regarding a cloud game server, it should be understood that any game or application computing system may use and benefit from the processing described herein. By way of example, other computing system may include game consoles, personal computer, mobile user devices, tablets, display screens, televisions, personal computer systems, servers, virtual machines, etc., that are local and remotely located. Furthermore, it should be understood that the various embodiments are not restricted to video game applications but any interactive application (e.g., app) may utilize the functionality described herein. Thus, reference to games should not be considered as limiting the scope to games, and any type of application may use some or all of the features described herein.

In one embodiment, when access is provided to a game site or application, a user interface may provide behavior metrics that are customized for the user for each game that the user is viewing or playing. These behavior metrics provide game state of the game and hints to allow the user to improve his game play. In some examples, user game play interactions are collected and analyzed in order to generate a personalized user interface (UI) and/or user experience design (UX). Examples are described regarding ways to change a main UI/UX interface after a user leaves an application to best assist the user in getting back into the action of the game. In some examples, specific user interaction data is captured during game play/movements in the application, which is then analyzed to identify appropriate hints and/or provide customized assistance to the user's subsequent game play. Providing this type of assistance to user reduces user frustration with games/application, and may lead to improving user engagement with the application/game.

In one embodiment, when a user selects a game for game play (i.e., application for user interaction), user interactions during game play are recorded in metadata. After a user exits a game session of the game application, the user interface is updated to include options providing details of the game play session, such as game state (in textual or image or video format), game statistics, hints and/or other assistance to help the user to improve his/her own game play of the game during subsequent game play sessions. The hints may be provided in different formats including audio format, video format, textual format, etc., and may include details of steps to take, sequence of button presses to make, a video clip of a different user that played and completed the game or achieved completion metrics for parts of the game, levels of